**For the convenience of the Students of Mineralogy, who reside in the vicinity of Philadelphia, I have had bound up with this work the following pages, which gives the most interesting localities of Minerals in equal distance from the city; and an entire rail road from Philadelphia to West Chester, now being made, will afford facilities to the mineralogist unequalled in any other district.

ON THE

MINERALOGY

OF

CHESTER COUNTY,

WITH AN ACCOUNT OF SOME OF THE

MINERALS

Of Delaware, Maryland, & other localities.

By GEO. W. CARPENTER.

Assisted by my friend Mr. George Spackman of Philadelphia, I published in the 9th vol. of Silliman's Journal, an account of the various minerals, which we found on a tour made in 1825, through Chester county and part of the state of Delaware. On a late revisit to those localities, and a further extent of investigation, I discovered many additional localities of interesting minerals, which with the previous catalogue already described, will embrace most of the minerals contained in the several townships which have yet been explored.

Chester county presents to the mineralogists a rich field for investigation. Her limestone, serpentine and gneiss, the predominant rocks of the county,

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contain inexhaustible beds of interesting minerals, and the numerous quarries every where in operation, greatly facilitate the means of procuring them. These circumstances, with the polite attention manifested towards strangers by the inhabitants of the county, and the singular hospitality which particularly characterizes them, are inducements of the strongest nature for encouraging the mineralogist, to visit this county in preference to almost any section

of country.

It is a gratifying circumstance for the lovers of natural history, to learn that mineralogy, its most interesting, useful and important department, is making rapid advancement in this county, and in the state of Delaware. Almost all classes of society are taking an interest in its promotion, particularly the farmers; and if the same zeal and ardor for investigation continue uninterrupted, we may reasonably expect some valuable acquisitions to result from their researches. Already several valuable materials have been found in abundance. Magnesite and ferruginous oxide of chrome, (chromate of Iron,)* have been extensively and advantageously worked for epsom salt, and chrome yellow. These articles, a few years since, were received exclusively from England; they are now made from the above materials of equal quality as the foreign, and at a lower rate than they can be imported, which has eventuated in the total exclusion of the foreign articles, and such has been the march of improvement, and the advancement of science, that a cabinet of Natural Science† has been

[•] This mineral has been very improperly termed chromate of Iron by the most respectable authors. Iron forms a very inconsiderable proportion of the mineral, and the chrome is not in the state of an acid but in that of an oxide; it may therefore with more propriety be called a ferruginous oxide of chrome.

[†] The West Chester Cabinet of Natural Sciences was organised in 1826, and is already in possession of a fine collec-

established at West Chester, and is now in a flourishing condition, and under the most favourable cir-

tion of minerals, and an extensive herbarium, and contributions through the zeal and activity of the members are daily making to each department; under these circumstances the institution is now in a rapidly improving condition. The minerals are arranged in two departments, one of which is devoted exclusively to the minerals of Chester county, by which you may view at a glance, all the minerals which have yet been discovered. The other is a general cabinet, arranged according to Professor Cleavland's admirable system, and includes, besides those of the county and neighbourhood, a considerable number from various localities in America and Europe.

Distinguished credit is due to Mr. John W. Townsend, corresponding secretary, and to H. H. Van Amringe, A. Marshall, and Townsend Haines, Esqrs. curators, for their indefatigable zeal, industry, and consequent success, as manifested by the present favourable condition, of this department of the cabinet; also to William Jackson, Vice President, and Mr. Joel Baily of East Marlborough, for their very liberal donations.

There are also two herbariums, containing upwards of two thousand species. One is devoted exclusively, to the plants of the county, and denominated the CHESTER COUNTY herbarium, which contains specimens of nearly all the known indigenous plants of the county. Since the publication of the Florula Cestrica, a recent valuable work by Dr. Darlington, several species, not enumerated in the catalogue of that pub-Mication, have been added to the collection The other is demominated the general herbarium, is arranged according to the natural order of Jusseau, and contains about one thousand two hundred specimens, many of which are from the United States, but the greater number have been received from France and Germany, and constant additions are making to the herbarium through Dr. William Darlington, President of the Institution, to whose scientific and critical knowledge of this interesting department of natural science, with his persevering industry and zeal, in arranging, collecting and exchanging specimens, the cabinet is exclusively indebted for the remarkable condition of its herbarium, which reflects high honour upon the institution. Dr. Darlington's arrangement, independently of many conveniences, affords so great facility, that a plant of any class and species may be selected, without the least difficulty in a minute of time, and without disturbing the arrangement. The rapid progress which this institution has made within the short period since its establishment, and the augmenting interest which the agriculturists of the county are taking in its support, warrant the most favourable anticipations of its future usefulness and importance.

cumstances for becoming a highly useful and important institution. An institution* of the same kind has just been established at Wilmington, under the most favourable auspicies, and bids fair to prosper.

Among the townships of Chester county, East Marlborough, London Grove, Newlin and East Bradford, have been most examined. Pennsbury, Kennet, New Garden, West Marlborough, West Bradford, West Goshen and Westown, have been examined to a certain extent. Penn, Londonderry, Upper and Lower Oxford, East and West Fallowfield, New London, and East and West Nottingham, have been scarcely examined at all by the mineralogist. The townships which have not yet been explored, are in the south west part of the county, and as most of them contain abundant beds of limestone and ridges of serpentine, they will no doubt disclose, on examination, many new and interesting minerals.

East Marlborough is more remarkable for the great variety of minerals, than for the abundance of any one kind except the carbonate of lime, which forms extensive beds throughout the township, and the extreme value of this mineral in enriching and improving the soil, is admirably displayed, in the luxuriance of almost every vegetable species within

its influence.

Newlin is not only remarkable for a considerable variety of minerals, but particularly for the great abundance of its serpentine, quartz and beryl; the two latter occur of an interesting character, and are extremely abundant, particularly the beryl, which

^{*} The Delaware academy of Natural Sciences has, within a few months, been established at Wilmington. They are pursuing the same course as the cabinet of West Chester, in collecting the natural productions of the country, and have already a good collection of the minerals which have been discovered in their state and vicinity. They possess some extremely active and zealous members who will no doubt exalt the institution, by increasing the means of its usefulness and prosperity.

constitutes almost a distinct formation, and the place has, from this circumstance, been denominated by the mineralogists, beryl hill, by which name it is known through several townships. Large quantities of detached crystals of beryls, may, at all times, be dug within a foot or two from the surface. Drusy quartz, of white, yellow and rich green colours, occurs in considerable quantity, in the vicinity.

Westown Township.

This township was not noticed in the former description, and has been as yet but partially explored: the following are the most important minerals which have been discovered.

Earthy and ferruginous oxide of magnese, of excellent quality, for employment in the arts and manufactures. I presented a sample to Mr. Abraham Miller, an ingenious potter of this city, who made use of it in his manufacture, and pronounced it equal to the imported. It occurs on Joseph Osburne's farm, three miles south of West Chester. It has not yet been worked, but its position and external appearances render it probable, that it is abundant.

Siliceous oxide and carbonate of manganese, of a reddish and yellowish brown colour, and of a somewhat foliated structure, same locality.

Manganesian garnet, massive, of a reddish brown colour, same locality.

Black schorl, traversing quarz in cylindrical crystals, very beautiful, on Joseph Osburne's farm. Fine acicular and fibrous hornblende, of a jet black

colour, same locality.

Limpid and smoky quartz, in beautiful transparent crystals, hexahedral prisms terminated by pyramids, loose in the soil, Joseph Osburne's farm.

A mine was opened on this farm about sixty years since for silver ore, and a small portion of the metal

was obtained. It was however abandoned in consequence of the minute quantity yielded, and a doubtful prospect of its producing advantageously. The oxides and carbonates of manganese, and the maganesian garnet, occur also on William Osburne's farm.

East Bradford Township.

Cyanite, in obliqe tetrahedral prisms, (primitive form,) from one quarter to one inch in thickness, and from one to three inches in length, occurs in mica slate and detached crystals, on the Strasburg road, near the bridge on the east branch of the Brandy wine—abundant.

Zircon, an interesting locality of this mineral occurs

in bluish quartz, near Jeffries' ford.

Feldspar, of a bluish color and a lameller structure, occurs near Jeffries' ford on the Brandywine.

Amethyst, of a rich violet colour, highly transparent, in hexahedral prisms terminated by pyramids, occurs detached in the soil, on James Gibbon's farm, three miles south of West Chester. Fine specimens from this locality, are in the cabinet of Natural Sciences of West Chester.

Sulphhret of iron, in large cubic crystals, on R.

Woodward's farm

Red oxide of titanium, same locality.

Sulphuret of iron, in cubic crystals, on Job Darlington's farm.

Plumbago, same locality.

Necronite, well characterised in disseminated masses, in Benjamin Copes' quarry.

Schorl, of a beautiful jet black colour, on J. Pain-

ter's farm.

Pennsborough Township.

Necronite, in carbonate of lime, in Mendenhall's lime quarries.

Amethyst, in beautiful violet crystals, on George Darlington's farm, adjoining Wister's.

Bog iron ore, same locality.

Mica, in regular bexahedral prisms, in granite, near Darlington's mill.

Newlin Township.

Green quartz, in drusy clusters and prismatic crystals, on the serpentine ridge, near Mason's farm.

Limpid quartz, in hexahedral prisms terminated by pyramids, in carbonate of lime, in Edwards' lime quarries.

Fluate of lime, of a deep blue colour, im small cubic

crystals, same locality.

Calcareous spar, in rhombic crystals and hexahedral prisms, having irregular sides, same locality.

Schorl, in beautiful cylindrical crystals, of a jet black

colour, same locality.

Beryl, of a rich green colour, near William Embries' malt house, in detached crystals.

Green mica, in foliated masses and crystallized in granite, near the celebrated beryl locality.

Green foliated tale, same locality.

Sulphuret of iron, in cubic crystals, same locality. Mica, of a grass green colour, beautifully straited, near Brandywine bridge, three miles west of Ches-

ter county poor house.

East Marlborough Township.

Iserine, in detached crystals and granular masses, at David Persey's mill race, also in quartz, in tetrahedral prisms straited, in John Baily's lime quarry. Tremolite, beautifully crystallized, in oblique four sided prisms, the acute lateral edges truncated with

dihedral summits, in John Baily is lime quarry. Sulphuret of iron, in cubic crystals occasionally truncated, on all its angles, also in dodecahedrons,

in John Baily's lime quarries.

Epidate, in hexahedral prisms, sometimes truncated on the edges of a yellowish green colour, on Isaac Taylor's farm, adjoining John Baily's, south.

Foliated talc, white and green, on A Marshall's farm,

also on McClouds, adjoining.

West Marlborough Township.

Phosphate of lime, in hexahedral prisms, of yellowish green colour, in granular limestone, in Bernard's

quarry.

Iserine. Beautiful specimens of this mineral occur in tetrahedral prisms, truncated on the angles, longitudinally striated, with oblique summits, in Bernard's lime quarry.

Brown spar, in small rhombic crystals, with the planes slightly curved, in Bernard's lime quarry.

Dogtooth spar, (carb. of lime) in semi transparent straw coloured crystals, McNeal's lime quarry.

New Garden Township.

Fibrolite, of a greyish white colour, in little bundles of delicate fibres and acicular crystals intimately connected, on Nathan Scarlet's farm, south of Phillips' quarry.

Black schorl, in cylindrical crystals and fibres, a very beautiful variety of this mineral, same lo-

cality.

Garnets, in dodecahedral crystals, of a deep red

colour, in mica slate, same locality.

Fibrous carbonate of lime, in J. Phillip's lime quarry. Carbonate of lime, in beautiful arborescent mammilary and botryoidal concretions, in Joshua Pusey's lime quarry.

Tremolite, in fine acicular crystals, and fibres of a pure snow white colour, radiating and diverging,

Brown's quarry.

Kaolin, an extensive bed of this mineral occurs on Israel Hoop's farm, New Garden township. This substance is extensively employed in the manufac-

ture of porcelain ware. Two manufactories, and the only one as yet established in the country, are supplied from this locality.

West Bradford Township.

Diallage and saussurite, near Worth's tavern, on the Strawsburg road.

Chromate of iren, in detached masses, and disintegra-

ted crystals, same locality.

Epidote, in beautiful hexahedral prisms, with dihedral summits, of a resplendent bottle green colour: the crystals are from one half to three inches in length, and from one sixteenth to three fourths of an inch in diameter, fully equal in size and beauty to those of the celebrated locality of Ardendal in Norway, occurs in primitive hornblende, on Smith's and McMullins farms, adjoining each other.

Zeolite, in fascicular groups of minute crystals and fibres, radiating from a central point, of a snow white colour, and pearly lustre, forming narrow veins in primitive hornblende, on Robert Lam-

bern's farm.

Chabasie, in rombic crystals, of a reddish brown colour, in hornblende associated with zeolite,

same locality.

Silico-calcareous oxide of titanium, in rhomboidal prisms, with dihedral summits, in a gangue of hornblende and feldspar, same locality.

Blue feldspar, of the lamellar variety, striated on the

surface, same locality.

Mica, in rhomboidal and hexahedral prisms, in granite, one mile north of Sharplesstown, on the

Amethyst, of a deep violet colour, in hexahedral Wilmington road. prisms, with pyramidal terminations, loose in the

soil, on George Passmore's farm. Fetid quartz, well characterized, in R. Wood's lime

quarry.

Limpid quartz, in hexahedral prisms, with pyramidial terminations, in the lime quarries near the poor house.

Iserine, in striated cylindrical crystals, imbedded in

quartz, same locality.

Sulphuret of iron, in cubic crystals, occasionally truncated on the angles, same locality.

London Grove Township.

Tremolite, in fibrous and radiated masses, in Ephraim

Wilson's quarry.

Phosphate of lime, perfectly transparent, of a rich bottle green colour, in hexahedral prisms and massive, on Allison's farm; this interesting locality was discovered by Dr. Allison who has liberally distributed specimens among our mineralogists.

Tourmaline, of a beautiful velvet black, in hexahedral prisms, terminated with trihedral faces, set on the lateral edges, on William Jackson's farm.

Red oxide of titanium, in tetrahedral prisms, with dihedral summits in gueiss, also massive, on William

Jackson's farm.

Iserine, tetrahedral prisms, truncated on the angels, and longitudinally striated, in Wm. Jackson's lime quarry.

Tremolite, crystallized, and in radiated fibres, same

locality.

Foliated and fine scaly tale, of a white colour, in Mitchiner's quarry, adjoining William Jackson's.

Brown tourmaline, in hexahedral prisms, in carbonate of lime, a beautiful mineral, in W. Jackson's, and Pile & Morrisson's lime quarries.

Crystallized quartz,* in hexahedral prisms with pyramidal summits, transparent, in Pile & Morri-

son's quarry.

^{*} A specimen of limpid quartz from Movison's quarry, presented to the Cabinet of Natural Sciences by W. Jackson, and now in their museum, a hexahedral prism with pyramidal termination, measures sixteen inches in circumference.

Brown spar, in rhombic crystals, slightly curved, of a brownish colour and beautiful pearly lustre, same locality.

Fetid quartz, well characterized, same locality.

Magnesian carbonate of lime, in rhombic masses and crystals, same locality.

Quartz, of a milk white colour, on William Jackson's farm.

Cyanite. An interesting locality of cyanite in the primitive form, has been discovered in this vicinity, by Dr. Allison.

Garnets, in dodecahedral crystals, abundant in the gneiss rocks, and detached, on W. Jackson's farm and neighbourhood; a specimen in the museum of the West Chester cabinet, measures 6.75 inches in circumference.

Specular oxide of iron, in quartz, near London Grove meeting house.

Mica, of a leek green colour, on William Jackson's

Cyanite, in fascicular groups or bladed crystals, of a pale and sky blue colour, on William Jackson's farm.

Black and reddish brown schorl, in acicular diverging crystals, and fibres in quartz, on W. Jackson's farm.

Smoky quartz, six sided prisms, detached in the soil, on W. Jackson's farm.

Calcareous spar, striated diagonally, to the rhombic cleavage, on W. Jackson's farm.

Dogtooth spar, of a straw yellow colour, in semitransparent crystals, in W. Jackson's lime quar-

Epidote, in hexahedral prisms, of a bottle green colour, in Mitchiner's lime quarry.

Red jasper, in detached masses, on W. Jackson's lime quarry.

New London Township.

Fibrolite, in delicate fibres, intimately connected, of a greyish white colour, and glistening aspect, on Robert Hudson's farm.

Schorl, in cylindrical crystals, of a jet black colour,

same locality.

Sundry Localites in Chestier County.

Zoisite, in rhomboidal, cylindrical acicular crystals, of a grey colour, in gneiss, in Bathwoods, near West Chester, West Goshen township, discovered by Townsend Haines, Esq.

Oxide of iron, the red hematitic variety, on the ser-

pentine ridge, Nottingham township.

Magnesite, forming narrow veins, in the serpentine ridge, West Goshen.

Mica, in beautiful hexahedral prisms, Kennet town-

ship.

Stalactical carbonate of lime, of a snow white colour, in arborescent, reniform, mammilary and botryoidal concretions, in John Robert's lime quarry, West Whiteland, Chester county, four miles north of West Chester.

Actynolite, in chlorite slate, near Waggontown,

Chester county.

Amianthus, in delicate silk fibres, forming minute veins in serpentine, Joseph Taylor's quarry, West Goshen near West Chester.

Plumbago, in quartz, near Charleston village, Charles-

ton township.

Epidote, in hexahedral prisms, of 'a yellowish green colour, Strode's mill, near West Chester.

Oxide of iron, highly magnetic, near Goshen meet-

ing house, East Goshen township.

Garnets, in dodecahedral crystals, of a brown colour, abundant on A. Hoop's farm, East Goshen township.

Rog iron ore, on Pennypacker's farm, Charleston

township.

Little Britain Township, Lancaster county, Penn.

Octahedral magnetic oxide of iron, in the serpentine

ridge, on Joel Jackson's farm.

Massive and crystallized ferruginous oxide of chrome, or chromate of iron, occurs on a minor ridge of serpentine, about a mile north of the main serpentine ridge, being about two miles west of the south western point of Chester county, on the property of McKim, Sims, & Co. of Baltimore, adjoining Joel Jackson's farm. The disintegrated crystals of chromate of iron, are found coating the cavities of all the ravines made in the sides of the hill, and indicate the existence of this valuable material in

quantity.

Magnesite. An extensive locality of this valuable mineral occurs, forming veins in the serpentine of considerable thickness, same locality; and is now extensively quarried and manufactured by Messrs. Mc Kim, Sims, & Co. of Baltimore, into sulphate of magnesia, (Epsom salts.) These gentlemen have succeeded in making a purer salt at a much less price than it can be imported, which has entirely excluded importation; and the United States are now almost entirely supplied from this establishment. Four hundred or five hundred tons of magnesite, have been obtained from this locality, and Messrs. McKim & Sims manufacture 1,500,000 lbs. of Epsom salt annually.

Actynolite, in green compressed crystals, in talc,

serpentine ridge, on Joel Jackson's farm.

Noble serpentine, with delicate veins of amianthus,

serpentine ridge, on Joel Jackson's farm.

Chalcedony. An interesting locality of this mineral occurs near the magnesite above described, and about one and a half miles distant from the celebrated locality at Rocks springs, described in my paper, and near the locality of magnesite and chromate of iron.

DELAWARE.

New Castle County.

Phosphate of lime, in granite, of a bluish green colour, in hexahedral prisms, occasionally longitudinally striated, from one sixteenth to one and a half inches in diameter, and from half to two inches in length, abundant on a farm adjoining Wistar Dixon's east, and about six miles from Wilmington.

Beryl, of a fine apple green colour, in hexahedral prisms, in granite, on a farm adjoining Dixon's and near the serpentine ridge.

Precious garnets, in granite, of a brilliant red colour, in dodecahedrons, on Dixon's farm in the wood

near the house.

Schorl, of a dark red colour, in cylindrical crystals, in granite, same locality.

Brown and red hematite, on the serpentine ridge near.

Jasper, of a reddish brown, and yellowish colour, forming veins in serpentine, Dixon's farm.

Quartz, of a reddish brown colour, in six sided prisms, terminated at both extremities, by six sided pyramids, resembling the quartz of Compostella,

Same locality, also, near the Centerville turnpike. Drusy quartz, limped, yellow, and green, in beauti-

Feldspar. An extensive bed of this mineral, occurs adjoining Dixon's farm, the land containing it has lately been purchased by Mr. W. E. Tucker of Philadelphia, who employs the article extensively in the manufacture of Porcelain ware. This ware of which the feldspar, is an important constituent, has been brought to such perfection by Mr. Wm. E. Tucker, that it is pronounced by competent judges, to possess a soundness of body, smoothness of glazing, and beauty of lustre, fully equal to the

imported, and surpasses in purity of whiteness, either the French or English china, which is met with in our market.

Epidote, massive, and crystallized, in primitive hornblende, on the Kennet turnpike, near the Buck

tavern.

Lamellar hornblende, possessing somewhat the lustre and colours of the hypersthene, same locality.

MARYLAND.

Cecil County.

Schorl, of a velvet black colour, in beautiful cylindrical crystals, disseminated in quartz, near the fall of north east creek.

Actynolite, of a bottle green colour, in compressed acicular crystals, in talc, near Cooptown, Hartford

county.

Magnetic oxide of iron, massive, and in octahedral crystals, in chlorite slate, same locafity.

Fibrous tale, of a reddish colour, same locality.

Magnesite. An extensive locality of this valuable mineral, occurs at Bare Hill, near Baltimore, and has been extensively employed in the manufacture of Epsom salts; it is now obtained from Little Britain township, Lancaster county, as before described.

Bucks County, Penn.

Magnetic oxide of iron, half a mile above Newport, on the Neshamony creek. This ore was formerly worked, but has been abandoned, in consequence

of not producing advantageously.

Serpentine, having distinct laminæ, slightly curved. These pervade the serpentine in spots, and when viewed in direction of the laminæ, have a shining and pearly lustre, and when contrasted with the greenish black, dull, and opaque colour of the serpentine, have a glistening and metalic appearance,

somewhat resembling hypersthene, half a mile below Newport, on Roldman's run.

Lamellar feldspar, the glassy variety and graphic

granite, at Newport.

Tourmaline, of a rich black colour, in eight sided prisms, longitudinally striated, terminated by three sided pyramids, in granite which forms veins in gneiss, at Nevil's academy, near Bustleton.

Cyanite, of a fine blue colour, in flat crystals or blades, in quartz, forming a vein in gneiss, near the

same locality.

Scaly tale, in detached masses, occasionally contain-

ing asbestos, same locality.

Asbestoid actynolite, in silky fibres and acicular crystals, radiating from a centre in beautiful tufts, in detached masses, from one to fifty pounds weight, in a wood, half a mile east of Bustleton.

Magnesian garnets, massive, of a lamellar structure, on the Penny pack creek, three miles from Bustle-

ton, at the mouth of the Sandy run.

Black oxide of manganese, in gneiss, same locality. Phosphate of lime, in six sided prisms, terminated by six sided pyramids, of a light green colour, in

guartz, same locality.

Iridescent feldspar, of a bluish white colour, resembling the Labrador spar, on the farm of Mr. Jacob Van Arsdalen, three miles west of Attleboro, and

seven north of Bustleton.

Tremolite, of a grass green colour, in carbonate of lime, in oblique tetrahedral prisms, having the acute edges truncated, with dihedral summits, occasionally transparent, Van Arsdalen's farm, same locality.

Actynolite, of a deep green colour, same locality.

Mica, in six sided prisms, in granite, fibrous structure, in a diagonal direction to the angles of the prism, in which direction it may be cleaved, and numerous delicate fibres separated, on the Penny pack creek, one mile south west of Bustleton.

For the discovery of the above localities, in Bucks county, we are indebted to our friend Dr. Edward Swift, an indefatigable mineralogist of Bustleton, Penn.

At the locality of tremolite, iridescent feldspar and actynolite, on Jacob Van Arsdalen's farm, the following interesting minerals, also occur, which render this locality sufficiently attractive to mineralogists.

1. Tabular spar, in masses of several tons weight, analyzed by Dr. Morton, and Mr. J. P. Wetherill,

who obtained the following constituents:-

Silex, -		DE LA COLOR	51.50
Lime,	4	1 4 4	44.10
Oxide of iron,	757	1	1.00
Lost by calcination	7	-	.75
	3		
			07 25

2, Scapolite, massive and crystallized. 3. Pyroxene, in hexahedral prisms. 4. Zircon, forme soustrative of Hauy. 5. Mica, clove brown, and emerald green. 6. Blue quartz, in small quantity. 7. Feldspar, massive, of a dark blue colour, also in rhombic prisms, with the terminal angles truncated, Unitaire of Hauy. 3. Garnet, granular and in small dodecahedral crystals. 9. Phosphate of lime, massive, and in hexahedral prisms. 10. Graphite, massive, and in delicate hexagonal tables. 11. Sulpburet of iron, massive, and in octohedral crystals. 12. Silico-calcareous oxide of titanium, in oblique four sided prisms.

I have merely given a catalogue of these minerals, as an elaborate and detailed account of them, has been published by Dr. Samuel G. Morton, of Philadelphia, in the Journal of the Academy of Natural

Sciences of Philadelphia, for June, 1827.

Philadelphia County.

Sil.-calcar. oxide of titanium, in oblique four sided prisms, at Radner's mill, near the falls of Schuyl-

kill, also on the township line road, near Ritten-

house's smith shop.

Phosphate of lime, massive, and in hexahedral prisms, imbedded in feldspar, on the township line road, same locality.

Graphite, massive, in gneiss rock, on Robinson's hill, on the Schuylkill, five miles from Philadelphia.

Limpid quartz, in hexahedral prisms, with pyramidal terminations, in detached crystals, same locality.

Chalcedony, on Longstroth's farm, near the York

road, five mile's from Philadelphia.

White beryl, in granite, hexahedral prisms, in Day's cave, near the residence of William Wister, Esq.

Graphic granite, and laminated feldspar, same lo-

cality.

'Cyanite, in bladed crystals, from a pale to a deep sky blue in granite, near Livzely's mill, on the Wisahicon.

Tourmaline, of a velvet black colour, in hexahedral prisms, near Rittenhouse's paper mill, on the Wisahicon.

Hematite, (brown oxide of iron,) in mamilary masses, near Jacob Wise's mill on the Wisahicon.

Red oxide of titanium, massive and crystallized, in clay slate, on Wise's lane, near Wisahicon.

Limpid quartz, in pyramidal clusters and drusy aggregates, same locality.

Smoky quartz, highly transparent, near the township

line road, six miles from Philadelphia.

My friend Mr. John Wister, of Germantown, has obtained very fine specimens from each of the above

docalities of Philadelphia county.

Having on hand duplicates of all the above minerals, with an extensive collection from other localities, I shall be happy to exchange them for those from other districts.

GEORGE W. CARPENTER, No. 301, Market Street. P. S. The manufactory of porcelain at Jersey city, one of the two mentioned in the above account, has we understand been discontinued, and that at Philadelphia, is stated to be the only one in the United States.

ERRATA.

Page 208, for the dose of Sal. Martis. read, 1 scru-

ple to ½ drachm.

I must beg indulgence for any typographical errors which occur in this work, as press of business and continued engagements, prevented me from correcting the proof sheets. There will be no doubt several errors, such as approbrium for opprobium, emmanagogue for emmanagogue, &c. &c. They are however of no consequence, as they will all be perfectly understood, and can lead to no misunderstanding.